CRITIQUE OF PLAINTIFFS' RESPONSE TO DEFENDANTS' OBJECTIONS TO PLAINTIFFS' EXPERTS

SUMMARY OF CRITIQUE

Plaintiffs' Response (at p. 796, line 6ff.) makes four specific assertions in succession, to which I respond as follows:

First assertion:
"Defendants' "hybrid methodology" argument is based on their expert's [Dr. Morrison's] *belief that Mr. Ely estimated the Hispanic and Asian populations in FISD using Spanish and Asian surname lists, while using ACS census data to estimate African American and other groups. The criticisms lodged by Defendants and their expert are based on unfounded assumptions and mischaracterized methods Mr. Ely used for his Illustrative District".*

Response: I have amended my belief based upon Mr. Ely's more thorough and complete explanation.[1] He did not use an untested, unproven "hybrid methodology" to form his illustrative district.

Second assertion:
"Defendants also request exclusion of all of Dr. Mayer's testimony offered to establish Gingles Prongs 2 and 3 because Mr. Ely provided all of the data used for Dr. Mayer's analysis."

Response: The precinct-level voter data that Mr. Ely furnished to Professor Mayer is based upon a hybrid methodology that is scientifically unsound. If Professor Mayer unwittingly relied upon those voter data to assess minority cohesiveness (*Gingles* second prong), his opinions regarding minority cohesiveness cannot be considered scientifically reliable. I base this opinion on Mr. Ely's statement that he derived precinct-level voter data from American Community Survey CVAP data only for Black voters but not for Hispanic or Asian voters.[2] Mr. Ely should instead

[1] This point was ambiguous in Mr. Ely's Expert Report of September 26, 2019 (see paragraph 25, final sentence). In his subsequent Declaration dated November 21, 2019, he rectified the ambiguity (at paragraph 9): "To construct the Illustrative District in this Action, I used 2010 United States Decennial Census data to analyze the total population and voting age population (VAP) by race and Hispanic Origin, and data from the 2017 five-year American Community Survey (ACS), which also is compiled and published by the United States Census Bureau, to analyze the citizen voting age population (CVAP)."

[2] Ely Expert Report dated September 26, 2019 (at Paragraphs 17-18): "17. Precinct geography was overlaid on census geography to produce estimates of CVAP composition for each precinct. Each registered voter was coded to indicate if the voter had a Spanish or Asian surname as described above. For voters with non-Spanish and non-Asian surnames, the CVAP data was used to estimate the probability that the voter was Black or African American. 18. For each of the registered voters who are recorded to have voted in each election, this information was aggregated to the precinct level in order to produce a count for each precinct in each election of

have derived such data for all three groups from official ACS CVAP data--which he did to evaluate the first *Gingles* prong, and for the same reason--to ensure comparability.

Third assertion:
"Defendants attempt to cast doubt on data and methodology that is not only reliable, but the most up to date and widely used in Voting Rights Act cases to prove ***all three Gingles factors****."* [emphasis added].

Response: This assertion conflates two issues: the plausible methodology and official published data that Mr. Ely has used to evaluate the first *Gingles* prong; and the hybrid methodology and strange amalgamation of dissimilar data that Mr. Ely furnished to Professor Mayer to use in evaluating the second and third *Gingles* prongs. In preparing Professor Mayer's data, Mr. Ely inexplicably departed from accepted scientific practice. His motive for doing so is puzzling.

Fourth assertion:
"For these reasons, Defendants' motion should be denied."

Response: This assertion is specious in light of my three responses above.

DETAILS

For many years, demographers like myself have used official Census Bureau data to estimate the racial/ethnic composition of eligible voters (i.e., voting-age citizens). Today, such estimates are prepared routinely for election districts, precincts, polling places and the like, based upon American Community Survey (ACS) data. Political scientists have devised and relied upon ever more sophisticated methods to translate such hyperlocal data into credible estimates of legally recognized standards upon which courts now rely.

Mr. Ely's more complete explanation has clarified one point. He has relied exclusively on American Community Survey (ACS) data in forming his illustrative district intended to satisfy the first *Gingles* prong. However, I still question his claim to have used the "best practice" IPF method ("raking"), based upon his statements to date.

On a second point, I reiterate my critique of the hybrid methodology Mr. Ely used to prepare the precinct-level voter data that he furnished to Professor Mayer. This methodology is untested, unproven, and unsuitable for drawing conclusions with reasonable scientific certainty. If Professor Mayer unwittingly relied upon these voter data to assess minority cohesiveness (the second *Gingles* prong), his opinions regarding minority cohesiveness cannot be considered scientifically reliable.

Mr. Ely's Hybrid Methodology is Untested, Unproven, and Unsuitable for Drawing Conclusions with Reasonable Scientific Certainty

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total voters, Spanish surnamed voters, Asian surnamed voters, and estimate African American voters."

Mr. Ely's methodology combines two entirely different approaches: (1) using voters' surnames to infer the percentage of voters in specific elections who are Hispanic or Asian;[3] and (2) using official Census Bureau ACS data for the citizen voting-age population (CVAP) to directly estimate the percentage of voters in specific elections who are Black. Mr. Ely implemented the first approach to derive incompatible proxy estimates of Hispanic voters and Asian voters. He relied upon the second approach to derive a third incompatible probabilistic estimate of Black voters. The resulting hybrid count of each group's voters is necessarily rescaled to equal the actual (known) total count of voters in a precinct. This hybrid count produces an untrustworthy "apples and oranges" estimate of the number of Hispanic, Asian, Black, and White nonHispanic voters in a precinct.

This hybrid methodology departs entirely from the standard practices in my field. Those practices dictate the use of surname analysis to gauge the relative share of voters in a precinct who are of a particular race/ethnicity (e.g., Hispanic or not; or Asian or not).

More specifically, I know of no instance in which such an unproven methodology has been validated to count the number of voters who are Hispanic ***or*** Asian ***or*** Black ***or*** not. Nor does Mr. Ely cite a single peer-reviewed scientific study or journal publication validating this hybrid approach.

Because it is untested and its reliability is unknown, this hybrid methodology is unsuitable for drawing conclusions with reasonable scientific certainty. No expert in my field would rely upon such a methodology, given the obvious preferred alternative--which would be to use the Census Bureau's ACS CVAP data. The latter are consistent measures for estimating the racial-ethnic composition of a precinct's eligible voters. Mr. Ely's hybrid methodology already uses these preferred data, but only for voters who are Black.

Mr. Ely Used ACS CVAP Data Exclusively to Form His Illustrative District for Satisfying the First *Gingles* prong

Ironically, Mr. Ely chose to follow standard practice for his own analysis. He now clarifies that he did use these preferred data to form his illustrative district. That is, he used official ACS CVAP data for each individual minority population, instead of an untested hybrid method that combined ACS estimates with surname-based proxies. I am puzzled by why he would depart from this established approach to estimate the racial-ethnic composition of actual voters in a precinct, particularly in light of the well-documented limitations of using Asian and Spanish surnames as proxies.

Mr. Ely Inexplicably Departed from Accepted Scientific Practice In Preparing Professor Mayer's Data

[3] These two approaches use Spanish surname analysis and Asian surname analysis. See my coauthored article "Surname Analysis for Estimating Local Concentration of Hispanics and Asians," *Population Research and Policy Review*, 1994 (with A. F. Abrahamse). *Access at:* https://www.researchgate.net/publication/270279296_Surname_Analysis_for_Estimating_Local_Concentrations

Why did Mr. Ely depart from standard practice, given the inherently problematic issues posed by blending surname proxy data (for Hispanic and Asian persons who actually voted) with ACS CVAP data (for Black persons eligible to vote)?

I have authored various scientific publications on developing, refining, and evaluating surname analysis. I am troubled by the serious defects and deficiencies inherent in Mr. Ely's hybrid approach. I base this opinion on (1) my considerable first-hand experience in applying Spanish and Asian surname analysis in local contexts, (2) my detailed familiarity with the US Census Bureau's own extensive technical evaluations of its List of Spanish Surnames, (3) my careful reading of the Lauderdale and Kestenbaum's seminal evaluation of the Asian surname lists Mr. Ely has used[4]; and (4) the potential risks associated with combining two *proxies* for estimating the count of *actual voters* (those with Spanish surnames and those with Asian surnames) with an estimated count of *eligible* voters (Black CVAP). Below, I elaborate on these risks.

First, Lauderdale and Kestenbaum developed four distinct and separate Asian surname lists: ***predictive*** and ***strongly predictive***. Each list, the authors emphasize, is suited to different applications, dictated by the need for accuracy--that is, how sure we are that a given person actually *is* Asian versus how large a proportion of all the Asians in the population we have detected.

The ***predictive*** list of Asian surnames is designed so that at least 50% of persons with predictive Asian surnames are, in fact, of Asian origin. A subset of names from this predictive list (***strongly predictive***) is calibrated so that at least 75% of persons with those strongly predictive Asian surnames are, in fact, of Asian origin.

Professor Mayer apparently paid no heed to the unanswered question here: *Which list(s) did Mr. Ely use?* Either way, Professor Mayer has estimated the preferences of voters who may be Asian--or may not be Asian. The longer predictive list of Asian surnames will count more voters as "Asian" in each precinct; using the shorter strongly predictive list of Asian surnames will count fewer voters as "Asian" in each precinct. A comparable concern arises in using Spanish surnames. Depending on which list one uses, a political scientist would estimate the preferences of voters who may (or may not) be Hispanic.

Where one must estimate more than just one racial/ethnic minority group, demographers typically turn to official Census Bureau ACS CVAP data, in order to assure consistency of estimates across each racial/ethnic group (i.e., an "apples to apples" measure of voters who are Hispanic, Asian, Black, and White nonHispanic in a given precinct).

Second, many Asian residents of FISD happen to be of Asian Indian descent.[5] Lauderdale and

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[4] Lauderdale, D. S. and B. Kestenbaum, "Asian American Ethnic Identification by Surname," *Population Research and Policy Review* 19: 283-300 (2000).

[5] Source: American Community Survey, 5-year 2017 file, Table S0505. The Asian population of FISD is composed predominantly of persons of Asian Indian descent (who account for most South Central Asians). See also: Pew Research Center, *Key Facts About Asian Origin Groups in*

Kestenbaum specifically caution that Asian Indians have the lowest positive predictive value (PPV) of all Asian nationalities in their study. PPV is the proportion of persons whose names appear on the list who were born in the corresponding country and is a measure of accuracy.

Third, Lauderdale and Kestenbaum (at p. 294) warn against identifying an aggregate group of Asian Americans without adjusting for differences in the sensitivity among individual ethnic categories (China, India, Japan, Korea, Philippines, and Vietnam). Mr. Ely did not make these necessary adjustments for differences in sensitivity.

In summary, Mr. Ely's statement that his method produce "a count for each precinct in each election of . . . Asian surnamed voters" [Paragraph 18, page 4 of 66, Analysis of Registered Voters and Illustrative Frisco ISD Trustee Districts; Expert Report of David Ely] should not be read by Professor Mayer as "a reliable count of *Asian voters*." The true count of Asian voters in a precinct could be substantially lower than what Mr. Ely's hybrid method registers, given predictive accuracy in the range of "50%-75%" or "at least 75%". Professor Mayer's failure to recognize that Asian Indians account for a high proportion of FISD's Asian residents is a further basis for regarding these estimates as inferior to those readily available using the American Community Survey CVAP data.

SUMMARY OF OPINIONS

1. I reiterate my critique of the hybrid methodology Mr. Ely used to prepare the precinct-level voter data that he furnished to Professor Mayer. This methodology is untested, unproven, and unsuitable for drawing conclusions with reasonable scientific certainty. If Professor Mayer unwittingly relied upon these voter data to assess minority cohesiveness (*Gingles* second prong), his opinions regarding minority cohesiveness cannot be considered scientifically reliable.

2. Mr. Ely has departed from accepted scientific practice in preparing Professor Mayer's data, despite the well-documented limitations of relying upon Asian surnames in a population so heavily weighted with Asian residents of Asian Indian descent.

Peter A. Morrison

December 2, 2019

the U.S. **https://www.pewresearch.org/fact-tank/2019/05/22/key-facts-about-asian-origin-groups-in-the-u-s/**